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EXAMINER

TORRES VELAZQUEZ, NORCA LIZ

ART UNIT

PAPER NUMBER

1771

DATE MAILED: 01/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/856,315	<b>Applicant(s)</b> YOON ET AL.	
	<b>Examiner</b> Norca L. Torres-Velazquez	<b>Art Unit</b> 1771	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) ☒ Responsive to communication(s) filed on 16 October 2003.

2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) ☒ Claim(s) 1-8 is/are pending in the application.

4a) Of the above claim(s) 7 and 8 is/are withdrawn from consideration.

5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.

6) ☒ Claim(s) 1-6 is/are rejected.

7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.

8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9) ☒ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on 5/21/01 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☒ All    b) ☐ Some    \* c) ☐ None of:

1. ☒ Certified copies of the priority documents have been received.

2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.

3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____	6) <input type="checkbox"/> Other: _____

### **DETAILED ACTION**

Applicant's amendments and accompanying remarks dated October 16, 2003 have been carefully considered and entered. Substitute Specification has been accepted.

#### ***Response to Arguments***

1. Applicant's arguments, see page 8 of arguments, filed 10/16/03, with respect to the provisional obviousness-type double patenting rejection with copending application 09/856,314 have been fully considered and are persuasive. The rejection of claims 1-3 and 5-6 has been withdrawn.
  2. Applicant's arguments filed on 10/16/03 have been fully considered but they are not persuasive.
    - a. In response to the rejection of claims 1-6 under 35 U.S.C. 112, first and second paragraphs, Applicants state that "It is obvious to one of skill in the art that the warp knit fabric having two layers is constructed, as commonly done in the art, by use of a 2-bar knitting machine". Further, that this Application is not limited by the knitting method used. And that one of skill in the art is reasonably apprised of the use of two-bar knitting machine to make a two-layered knit fabric.
- Applicant's arguments are not found persuasive on the grounds that the point is not what the two "layers" are formed from, but how the "layers" or yarns are structurally related. It is also the Examiner's position that the Applicant's use of the term "layer" is contrary to the accepted meaning in general, and in knit art, in particular. Specifically, in the knitting art, "layers" implies a fabric such as a double knit having two layers of fabric interknitted together or a knit spacer fabric. However, it does not appear that

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Applicant's invention encompasses these types of fabrics. With regard to the use of a two bar knitting machine to make a two layered knit fabric, the Examiner asserts that a two bar knitting machine does not produce the Applicant's two layer knit fabric. A two bar knitting machine is known to produce a single layer knit fabric having distinct technical and rear faces.

b. Applicants argue that SCHOLZ et al.'s invention differs from the claimed two layered warp knit fabric, however, due to the outstanding 112 1<sup>st</sup> and 2<sup>nd</sup> paragraph issues, the Examiner maintains that the patent issued to SCHOLTZ et al. teaches a knit fabric construction comprising a non-fiberglass micro-denier yarn in combination with a heat shrinkable yarn or a stretch yarn, and alternatively a stiffness controlling yarn, which presently meet the Examiners interpretation of a warp knit having an ultra fine yarn, and a synthetic yarn monofilament. Without sufficient enablement and/or definiteness, it is unclear how the present invention differs from the prior art product. The burden is shifted upon the Applicant to evidence how a two-layer warp knit fabric is constructed.

### *Specification*

2. The disclosure is objected to because of the following informalities: citation of priority claims in the first line of the specification are reserved for domestic priority under 35 U.S.C. 120. As such, it is not necessary and improper for Applicant to recite foreign priority claims in this manner. The Examiner suggests deleting the foreign priority claim related data from the disclosure.

Appropriate correction is required.

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***Drawings***

3. The drawings are objected to because there is only one figure and it should not be labeled Fig.1, it should be labeled FIGURE. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claim 1 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The specification does not disclose how the warp knit fabric structure is constructed to have a front surface layer that consists of ultra fine yarn with monofilament with a denier of 0.01-0.9, and a rear surface layer that consists of synthetic yarn or high shrinkage yarn with monofilament with a denier of 1-5. The specification lacks adequate disclosure of the two-layer structure, for purposes of examination these claims will be interpreted, as a warp knit that comprises ultra fine yarn, synthetic, or high shrinkage yarns in any structural combination. Claims 2-6 are further rejected for their dependency on claim 1.

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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7. Claims 1-4 and 6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1 is indefinite because it is not clear how the two-layer construction is achieved with a warp knit. Does the Applicant intend to make a knit with a two bar knitting machine or does the warp knit merely comprises different types of yarns?

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-4 and 6 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over SCHOLZ et al. (US 5,512,354) as stated in previous action.

SCHOLZ et al. discloses a knit fabric construction comprising a nonfiberglass micro denier yarn in combination with a heat shrinkable yarn or a stretch yarn, and alternatively a stiffness controlling yarn (Abstract). The fabric construction is suitable for use in orthopedic applications such as casting materials. (Column 2, lines 63-65). The reference further teaches that the nonfiberglass micro denier yarns are formed from fibers or filaments having a diameter of no greater than 1.0 denier. (Column 7, lines 1-10). Suitable micro denier yarns staple fibers and filaments of polyester, polyamide, polyolefin or rayon. (Column 7, lines 15-20) SCHOLZ et al. further teaches that micro denier yarns may be made using a combination of the above

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aforementioned filament materials. (Column 7, lines 39-43) The reference also teaches the use of highly texturized, heat shrinkable, extensible, thermoplastic yarns in the wale direction to provide the fabric with sufficient stretch without creating a high elastic rebound force. (Column 8, lines 50-68) The SCHOLZ et al. reference teaches a knit having a polyester heat shrinkable yarn ranging from 30-70 weight percent in the front bar and a polyester micro-denier fiber ranging from 30-70 weight percent in the back bar (Column 16, lines 5-10). It further teaches that the heat shrinkable yarn can be made of fibers and filaments of up to about 6 denier. Preferably, the heat shrinkable yarns are made of polyester, polyamide, and polyacrylonitrile fibers or filaments. (Column 9, lines 41-46) The stiffness controlling yarn can be a multi-filament or mono-filament of polyester, polyamide such as nylon or polyolefin. (Column 11, lines 6-36)

Although the reference does not explicitly teach the claimed recovery rate, it is reasonable to presume that said recovery rate property is inherent to the invention of SCHOLZ et al. Support for said presumption is found in the use of like materials (i.e., polyester heat shrinkable yarns and micro-denier yarns staple fibers and filaments of polyester, polyamide, polyolefin or rayon). The burden is upon the Applicant to prove otherwise. *In re Fitzgerald* 205 USPQ 594. In addition, the presently claimed recovery rate property would obviously have been present once the SCHOLZ et al. product is provided. *In re Best*, 195 USPQ 433, footnote 4 (CCPA 1977)

9. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over SCHOLZ et al. (US 5,512,354) as stated in previous action.

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SCHOLZ et al. does not specifically teach co-polyester high shrinkage yarn, however, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use known co-polyester high shrinkage yarns. It has been held to be within the general skill of one of ordinary skill in the art to select a known material on the basis of suitability for the intended use. *In re Leshin*, 125 USPQ 416.

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Norca L. Torres-Velazquez whose telephone number is 571-272-1484. The examiner can normally be reached on Monday-Thursday 8:00-4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.




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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-0994.

Norca L. Torres-Velazquez  
Examiner  
Art Unit 1771

December 18, 2003



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